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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/780,529	02/09/2001	Ari Tourunen	324-010100-US(PAR)	8381
2512	7590	05/03/2006	EXAMINER	
PERMAN & GREEN 425 POST ROAD FAIRFIELD, CT 06824			JUNTIMA, NITTAYA	
			ART UNIT	PAPER NUMBER
			2616	

DATE MAILED: 05/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/780,529

Applicant(s)

TOURUNEN ET AL.

Examiner

Nittaya Juntima

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-16, 22-24 and 30-34 is/are allowed.
- 6) ☒ Claim(s) 17, 21, 25 and 29 is/are rejected.
- 7) ☒ Claim(s) 18-20 and 26-28 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/17/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This action is in response to the amendment filed on 2/13/2006.
2. The objection to the claims is withdrawn in view of applicant's amendment.
3. Claims 1-16, 22-24, and 30-34 are allowed.
4. Claims 17 and 25 remain rejected under 35 U.S.C. 102(b).
5. Claims 21 and 29 remain rejected under 35 U.S.C. 103(a).
6. Claims 18-20 and 26-28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Specification

7. The disclosure is objected to because of the following informalities:
 - on page 12, line 34, following "layer" insert "(724);"
 - on page 12, line 37, following "layer" insert "(726);"
 - on page 12, line 37, following "update" insert "(728)."

Appropriate correction is required.

Claim Objections

8. Claims 23, 24, 25, 31, and 32 are objected to because of the following informalities:
 - in claims 23 and 31, line 3, "such as" should be changed to "including;"
 - in claims 24 and 32, line 3, one of the commas before "using" should be

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deleted;

- in claim 25, line 16, "indicting" should be changed to "indicating."

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 17 and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Ejzak et al. ("Ejzak") (USPN 5,444,718).

Regarding claim 17, Ejzak teaches a terminal (transmitter 100 in Fig. 1) comprising:

Means of a counter (125 in Fig. 1) for defining a data packet number for convergence protocol packets (data packets received from upper layer control 50 and transmit buffer 110) to be transmitted between the terminal (a transmitter 100 in Fig. 1) and a network element (a receiver 200 in Fig. 2, e.g. a host, col. 1, lines 21-25). See col. 2, lines 20-29 and 60-63.

Means for transferring (transmit controller 120 in Fig. 1) the convergence protocol packets to be transmitted, to a link layer to be transmitted (col. 2, lines 57-67 and col. 3, lines 5-10).

Means for receiving acknowledgements of received convergence protocol packets from the network element (periodic status control message received at transmitter 100 from receiver 200, col. 4, lines 7-12).

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Means for transmitting identification data (identification data is not defined, reads on contents of the packets that were not received by receiver 200) of lost convergence protocol packets (not received packets) on the link layer to the network element in response to the link layer being not capable of securing a reliable transmission of the convergence protocol packets (data packets, including their contents, that were not received by receiver 200 are retransmitted in response to the periodic status control message received at transmitter 100, col. 4, lines 7-10, and col. 5, lines 9-12, 21-27).

Claim 25 is a network element claim containing similar limitations to terminal claim 17, and is therefore rejected under the same reason set forth in the rejection of claim 17.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 21 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ejzak et al. ("Ejzak") (USPN 5,444,718) in view of Wager et al. ("Wager") (USPN 6,519,223 B1).

Regarding claim 21, Ejzak fails to teach that means for transmitting the identification data of the lost convergence protocol packets on the link layer to the network element in a link layer data unit comprising a command to move a receiving window.

However, as shown in Fig. 3, Wager teaches means for transmitting the identification data of lost convergence protocol packets (lost convergence protocol packets read on all PDUs

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220 carrying segments of the discarded SDU 210) on the link layer to a receiver (250) in a link layer data unit comprising a command to move a receiving window (a move receiving window request message 280 sent to the data link layer 60b of the receiver 250). See col. 3, lines 63-col. 4, lines 13, 28-47, and col. 5, lines 49-col. 6, line 3.

Given the teaching of Wager, it would have been obvious to one skilled in the art at the time the invention was made to modify the teaching of Ejzak to include means for transmitting the identification data of the lost convergence protocol packets on the link layer to the network element in a link layer data unit comprising a command to move a receiving window. The motivation/suggestion to do so would have been to ensure that the PDUs of a particular SDU as received by the receiver, e.g. the network element, are discarded in the receiver buffer of the receiver as taught by Wager (col. 5, lines 57-64).

Claim 29 is a network element claim containing similar limitations to terminal claim 21, and is therefore rejected under the same reason set forth in the rejection of claim 21.

Response to Arguments

13. Applicant's arguments filed 2/13/2006 have been fully considered but they are not persuasive.

In the remarks, the applicant argues that Ejzak does not teach the acknowledgements that the link layer is not capable of securing a reliable transmission of the convergence protocol packets, and the identification data of the lost convergence protocol packets is transmitted when the acknowledgements from the network element indicate that not all data packets were received correctly.

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In response, Ejzak clearly teaches that periodically, the receiver 200 in Fig. 2 (equivalent to the network element) sends to transmitter 100 in Fig. 1 (equivalent to the terminal) a status control message (equivalent to the acknowledgements) indicating which packets were received correctly and not correctly or not at all (equivalent to the lost convergence protocol packets), col. 4, lines 7-10. Therefore, when periodic status control messages of Ejzak indicate the packets which were not received by the receiver 200, i.e. packets were lost, the periodic status control messages indicate that the link layer is not capable of securing a reliable transmission of the convergence protocol packets. Further, Ejzak teaches that data packets, including their contents, that were not received by receiver 200 are retransmitted by the transmitter 100 in response to the periodic status control message indicating which packets were not received by the receiver 200, col. 4, lines 7-10, and col. 5, lines 9-12, 21-27. Since the structure of the identification data is not defined, the identification data then reads on contents of the packets that were not received by receiver 200, i.e. packets were lost, and are retransmitted by the transmitter 100 to the receiver 200.

Therefore, Ejzak teaches the acknowledgements and the identification data as claimed. The rejection is sustained.

Conclusion

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

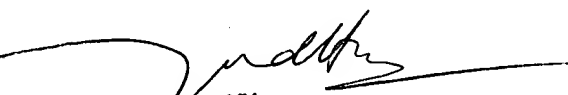
15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nittaya Juntima whose telephone number is 571-272-3120. The examiner can normally be reached on Monday through Friday, 8:00 A.M - 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on 571-272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nittaya Juntima
April 28, 2006

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